

In the Claims:

1. (currently amended) A substrate including a scatterometry target and other features, each of said other features having at least one of a microelectronic function or a microelectromechanical function, said scatterometry target comprising:

a plurality of parallel elongated features extending in a first direction of said scatterometry target, each of said elongated features having a width in a widthwise direction transverse to said first direction, wherein a ratio of a length of said scatterometry target in said first direction to said width of each said elongated feature is greater than ~~or equal to about 50~~, said width of said elongated features mimicking a width of said other features; and

a plurality of stress-relief features disposed at a plurality of positions along said length.

2. (previously presented) The substrate of claim 1, wherein said stress-relief features include connecting features which connect pairs of said elongated features.

3. (previously presented) The substrate of claim 1 wherein said stress-relief features include gaps, said gaps interrupting said elongated features at intervals along said length of said scatterometry target.

4. (previously presented) The substrate of claim 2 wherein said stress-relief features further include gaps, said gaps interrupting said elongated features, wherein said scatterometry target including said connecting features and said gaps is adapted to

produce a return signal mimicking a return signal from a scatterometry target not having said stress-relief features.

5. (previously presented) The substrate of claim 4 wherein said elongated features are provided in a layer of photoresist.

6. (previously presented) The substrate of claim 5 wherein said elongated features mimic patterned photoresist layer features at critical dimension.

7. (previously presented) The substrate of claim 1 wherein said stress-relief features include jogs in said elongated features.

8. (previously presented) The substrate of claim 2 wherein said connecting features include bridges, said bridges satisfying the relation $0.02 > (N_B L_B)/NL$, where N_B is the number of bridges of a grating, L_B the length of each bridge, N the number of lines of the grating, and L the length of the grating.

9. (previously presented) The substrate of claim 2 wherein said connecting features include bridges, said bridges satisfying the relation $0.02 > (N_G L_G)/NL$, where N_G is the number of gaps of a grating, L_G the length of each gap, N the number of lines of the grating, and L the length of the grating.

10. (previously presented) The substrate of claim 7 wherein said jogs satisfy the relation $f_j(N_j/N)(W/L) < 0.02$, where N_j is the number of jogs of a grating, N the number of lines of the grating, L the length of the grating, W the width of the grating, and f_j a process factor.

11. (currently amended) A substrate including a scatterometry target and other features, each of said other features having at least one of a microelectronic function or a microelectromechanical function, said scatterometry target comprising:

a plurality of parallel elongated features extending in a first direction of said scatterometry target, each of said elongated features having a width in a widthwise direction transverse to said first direction, each said elongated feature having jogs disposed at a plurality of locations along said length, said jogs causing said scatterometry target to produce a return signal which is sensitive to photolithographic defocus, wherein a ratio of a length of said scatterometry target in said first direction to said width of each said elongated feature is greater than ~~or equal to about~~ 50, said width of said elongated features mimicking a width of said other features.

12. (previously presented) The substrate of claim 11 wherein said jogs satisfy the relation $f_j(N_j/N)(W/L) > 1$, where N_j is the number of jogs of a grating, N the number of lines of the grating, L the length of the grating, W the width of the grating, and f_j a process factor.

13-18. (cancelled)

19. (previously presented) The substrate of claim 1, wherein said scatterometry target is adapted to produce a return signal mimicking a return signal from a scatterometry target not having said stress-relief features.